

Volume 22
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Summer/Fall
2002



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Claytonia

Newsletter of the Arkansas Native Plant Society

Arkansas Native Plant Society Fall Meeting

October 11th - 13th

Little Theater at North Arkansas College
South Campus
Harrison, Arkansas.

Schedule:

Friday

3:00-7:00 PM — Registration at the Little Theater

7:00 PM — Auction: Carl Amason — auctioneer "extraordinary"

Auction items often include native plants, seeds, and bulbs, along with homemade goodies such as wild fruit jams and jellies, books, art work, photography, craft items and what ever else you might want to donate. All funds raised go toward scholarships and the Flora of Arkansas project.

Saturday

8:30 AM All day field trip to Lost Valley hopefully led by Gary Tucker. Meet at the Little Theater at 8:30 am or for those that so desire - just meet at the parking lot at Lost Valley @ approximately 9 AM.

Plan on bringing lunch & drinks as there aren't any close eating places.

7:00 PM — Business meeting and program.

Sunday

8:30 meet at the Little Theater . Field trip to Baker Prairie led by Burnetta Hinterthuer and Linda Ellis. See the Spring Field Trip report by Burnetta on page 5 for some information about the prairie.

See the next page for information
about accommodations in Harrison..

Directions: The South Campus of North Arkansas College is off of Hwy 123 which comes off Hwy 65B (Main Street) near the Dairy Queen on the south side of Harrison. Be sure you take 65B.

Hotels & Motels in Harrison

Family Budget Inn

401 S. Main, (Hwy. 65B),

Phone: 870-743-1000

1 bed - 1 person - \$36.78 including tax

1 bed - 2 person - \$41.25 including tax

2 beds - 2-4 persons \$44.59 including tax

Continental breakfast provided.

The above Inn is the closest motel to the meeting place most of the rest are from 3 to 5 miles away.

Comfort Inn

1210 Hwy. 62/65/412 N.

Phone: 870-741-7676. Complimentary deluxe continental breakfast, free local phone calls, free HBO, two-room suites, fax/modem hook-ups, in-house movie rentals, heated outdoor pool.

Country Cottage Motel

Phone: 870-741-9667 .

Located 1/2 mile south of the Tourist Information Center and 1/2 mile north of Airport Rd. in Antique Hollow on Hwy. 65 N. in Harrison, AR 72601. Individual cottages offer privacy. Clean, nonsmoking rooms, cable TV, in-room coffee. No pets. Kitchenette available.

Cresthaven Inn

825 N. Main,

Phone: 870-741-9522

Remote-control Cable TV, pool, large and small kitchenettes available, refrigerators and microwaves in every room..

Days Inn of Harrison

1425 Hwy. 62-65 N.

Phone: 870-391-3297

Outdoor swimming pool and Jacuzzi open during season. All major credit cards accepted. Next to shopping center. Free cable TV with HBO. Free local calls. No pets.

Holiday Inn Express Hotel & Suites

117 Highway 43 E.

Phone: 870-741-3636 or 1-800-HOLIDAY

Complimentary breakfast bar, cable TV, game room, & sauna, indoor swimming pool, meeting room, and exercise facilities. Senior & AAA discounts available

The Hotel Seville

302 N. Main,

Phone: 870-741-2321

Built in 1929—a classic.

Ozark Mountain Inn

1222 N. Main St.

Phone: 870-743-1949

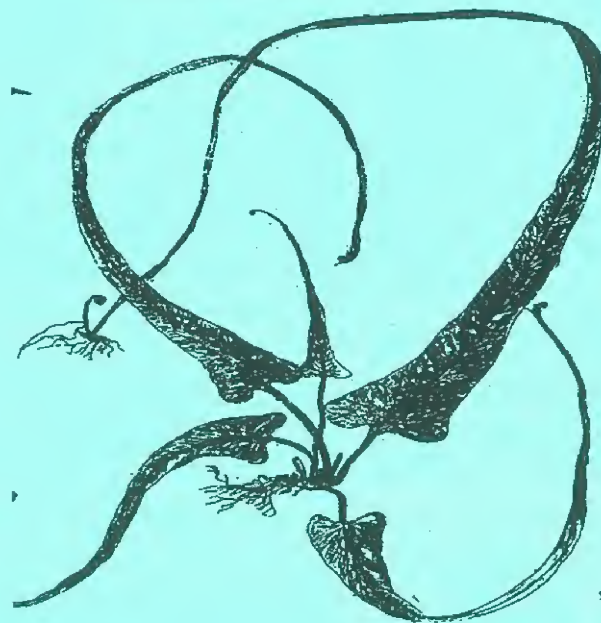
Kings, doubles and waterbed, cable TV; game room, playground, tennis court, complimentary a.m. coffee, very reasonable Bed & Breakfast specials, restaurant on premises, heated outdoor pool with kiddie pool; children free.

Super 8 Motel

1330 Highway 62/65 North

Phone: 870-741-1741 or 1-800-800-8000

Kids 12 & under stay free. Includes kids game room, complimentary continental breakfast, cable TV, outdoor heated pool, bus parking, and free local calls. AAA, AARP, and V.I.P. discounts available.



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SPRING GENERAL MEETING MINUTES

Saturday April 13, 2002

Russellville, Arkansas

The general meeting of the Arkansas Native Plant Society was called to order at 7:10 o'clock p.m., at the Central Presbyterian Church in Russellville, Arkansas, by the President, Lana Ewing.

SECRETARY'S REPORT: Carl Amason moved that the minutes of the fall meeting which were published in the Claytonia be approved. MaryAnn King seconded. The minutes were approved as published.

TREASURER'S REPORT:

Al Hecht reported a balance of \$7594.27 in the Operating Fund as of April 13, 2002, and \$22,208.67 in the scholarship, flora, and awards funds. Mary Ann King moved that the Treasurer's Report be approved; Carl Amason seconded; the report was approved as submitted.

NEW BUSINESS:

President Ewing appointed the Nominating Committee to select nominees for the offices of Vice-President, Treasurer, and Editor for the year 2002-2003, as follows: Katherine Hepinstall, Chairman; Carl Slaughter, Jay Justice, and Jewel Moore.

OLD BUSINESS:

Carl Amason, the Historian, asked for any photographs and newspaper articles about ANPS to be sent to him to go in the files.

ANNOUNCEMENTS:

Eric Sundell announced that Georganne Sisco will be at the Old State House Museum, 300 West Markham, Little Rock, on Tuesday, May 14, 2002, at 7:00 p.m. as part of the Gurley Lecture series. She will be speaking on the use of herbal remedies, and the safety and efficacy of drug interaction. Call Gerry Soltz at 501-324-8647 to RSVP. There will be a reception following the talk.

Eric announced that there were four applicants this year for scholarships.

The fall meeting will be held at Harrison, Arkansas. MaryAnn King will check in mid-September or early October on trips to Lost Valley and Baker Prairie.

Lana turned the meeting over to MaryAnn King who introduced Jay Justice who gave the program.

Respectfully submitted,
Sue Clark, Secretary



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Ozark Chapter News

Fall Events

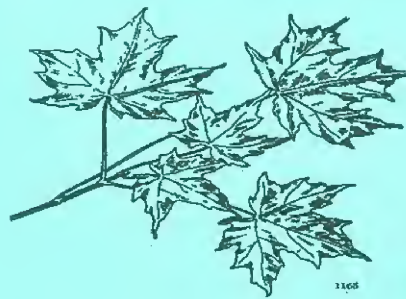
September 21st, 10:30 a.m. Asteraceae Workshop at Rush, Arkansas, located south of Yellville, Arkansas, off Hwy. 14. Linda S. Ellis will present a workshop on the late summer/fall composites. She has helped illustrate the new edition of the Flora of Missouri and is very familiar with the different species of the sunflower family. I learned a lot from visiting her glade last fall. We have talked about doing this in the past and finally are able to get it together. It will be fun and afterwards, we won't feel so frustrated by the dycs (doggone yellow comps). Coming from Yellville, you will pass the community of Caney; take County Road 6035 on the left side of the road. Rush is at the bottom of the hill (several miles). Take a right and park in the first parking lot on the left, the Morningstar Parking Lot. There will be a red ANPS balloon on a tree on Hwy. 14 and at the parking lot. We will meet at 10:30 a.m. and will proceed to the workshop site.

Rush is a former mining boomtown on the Buffalo River and if you have never visited, you are in for a treat. Rush Creek and Clabber Creek are major tributaries of the Buffalo and enter the Buffalo at Rush. There is a campground, if anyone would like to plan on camping out Saturday night and possibly floating from Buffalo Point to Rush on the next day. There are also motels in the area if anyone is interested in staying over in a motel. Call Burnetta at 479-582-0467 if you are interested in attending this workshop or arranging a campout or float trip. Suzie Rogers has suggested that our Ozark Chapter might consider monitoring Rush through a whole year's growth, visiting there in fall, spring, and summer. We can talk about this at the annual fall meeting of OCANPS in November.

November 2nd - 3rd OCANPS Annual Fall Meeting at Gilbert, Arkansas

Gilbert Cabin # 5 (check in at Gilbert Store) has been reserved for our use on November 2nd; check-in time is 3:00 p.m., but we may be able to get in earlier if the cabin has not been rented for Friday night.

Meet at the Riverside Restaurant at noon if you can and we will eat together; then, those who wish can take a hike along the Buffalo River Trail. The potluck will be held at 5:30 p.m., followed by a short business meeting and plant auction. Please think of possible field trips that we want to take next spring and volunteer to lead one of them. We need some new ideas and leaders for field trips. Even if you feel you do not know the plants that well, there will usually be someone along who will help out. For the auction, you may bring seed or living plants, crafts or other home-made goods such as jellies, pickled tubers of Dioscorea batatas (a favorite at the state auction), etc. This is always a lot of fun and we raise money for our chapter and its future adventures and projects. In the past, we have contributed toward the Arkansas Envirothon, an environmental competition between high school students that occurs in the spring. Bring plant or vacation slides, musical instruments, and games if you wish. If it is a nice starry night, we will do some star watching as well. The cabin sleeps 7 (possibly 9 if you bring sleeping bags) with three double beds and one single, but only has one bath. It is very attractive and comfortable, unlike the Red Barn some of you remember from two years ago. (Remember the Red Barn was cheap!) But there is also a campground available, if anyone had rather camp. On Sunday, those who wish may want to float, depending on the weather. Check-out time is 11 a.m. We hope to see you at the fall annual meeting; it is always a lot of fun and a great time to get together before the snow flies (perhaps I shouldn't be so optimistic!). Please call Burnetta at 479-582-0467 by October 19th if you plan to stay at the cabin on the 2nd and/or if you want to canoe the next day.



FIELD TRIP REPORTS

Baker Prairie

by Burnetta Hinterthuer

Spring field trips were definitely affected by the abundant rainfall we received during those months. Some field trips had low attendance while others had record attendance, all due in most cases to the weather - whether rainy or sunny.

On May 18th, I led a hike on Baker Prairie that had record attendance. Certainly, the weather that day was perfect, sunny and warm. The Mountain Home Herbalist Group along with members of Arkansas Native Plant Society numbered about 25 and were interesting plant enthusiasts, sharing their knowledge of the medicinal uses of the plants with the group. The mid part of May is one of my favorite times to view the prairie. Many people were first time visitors to Baker Prairie and were not disappointed. To everyone's amazement - especially Don's - Don Mills accidentally stepped on two turtles, one an Eastern ornate box turtle and the other a three toed box turtle! Linda Ellis took a photo of the turtles (see end of newsletter). I had heard that the ornate box turtles had not been seen on the prairie in recent years, so we really were feeling lucky at this point. Then we walked into an even bigger attraction. The grass pink orchid, Calapogon oklahomensis, was simply thriving this year. There must have been a hundred plus individuals in bloom. In the past, we have had to look for the orchids scattered in a small area. This year, one could spot the rich pink blooms at a distance. They were spreading out from the original site found in 1992 and were heading up the hill toward the highway. We kept moving from one plant to another exclaiming over its beauty surpassing the last. I don't know if I had a premonition or what, but I do remember mentioning that this was the school's property - not the part owned by Arkansas Natural Heritage Commission. Later this summer, we found out

that the school district is considering building a middle school, baseball field and parking lot on the acreage that includes or butts up to the grass pink orchids, royal catchflies, Eastern gama grass, Culver's root, and not to be outdone, the mole crickets that have evidently settled on this east side. Dr Doug James, ornithologist at the University of Arkansas, conducted a survey of the prairie last year and found six willow flycatchers during that time. This is a species that was thought to be extinct in Arkansas, following its disappearance from a prairie in Siloam Springs. This species was identified by Audubon at Arkansas Post, one of the few birds documented first in Arkansas. Will the proposed project affect species such as the grass pink orchid; willow flycatcher; the mole cricket that is food for the grasshopper sparrow; or the ornate box turtles that remain on the prairie?

Norma Ellis is a descendent of the Majors family that preserved this special piece of land by not plowing it decade after decade. We send a big thanks to Martha and Norma for keeping us advised this summer.

After visiting the prairie, we ate at the Neighbor's Mill and some of us decided to go on up to the Lead Hill glade. We were just beginning to have one of those rare botanical days!

A VISIT TO LEAD HILL GLADE

by Linda S. Ellis

Last May, the Ozark Chapter met for a field trip to Baker Prairie in Harrison and decided afterwards to visit a glade just north of Lead Hill while in the area. This glade is on private property, but the owner doesn't mind if folks visit to admire the native plants. And what a show greeted us. With the abundant rainfall we had this year, plants that usually just survive on glades were thriving.

I live on a glade on the Missouri/Arkansas border and it's always fun to see plants with which I am familiar, along with those new to me. I'm also a dedicated plant photographer and I'm always looking

for naturally occurring color combinations to use in paintings and in my own landscape. As we parked at the glade; it was obvious from the color everywhere that this was going to be a rare treat. The first plants that caught my eye were the prairie turnips (Psoralea esculenta) with their drooping clusters of lavender flowers and long silvery hairs. A few feet away there was a large colony of Leucanthemum vulgare, aka Chrysanthemum leucanthemum. By now my camera was getting a serious workout. As we worked our way across the glade, we began seeing stands of Penstemon cobaea var. purpurea with their showy red-violet flowers. These wonderful wine colored specimens were surrounded with abundant clumps of deep yellow Coreopsis grandiflora and made a spectacular sight. I've noticed that Nature can put colors together that you'd never wear together and they look great.

As we made our way further out into the site, I began to see quite a few plants that are found on Arkansas glades but are infrequent in Missouri. One

of the species of blue star (Amsonia illustris) was in bloom that day along with the large-flowered milkweed, Asclepias amplexicaulis, and a carrot family plant that was new to me, Spermolepis. Yellow coneflower (Echinacea paradoxa) was just starting to unfurl its petals amid clumps of purple Phlox pilosa, adding yet more vibrant color combinations to the glade. As we started back to the cars, we found a stand of bladder campion (Silene cucubalus) in bloom. Usually this plant is unremarkable but with the extra rain this year, it was fully flowered and got its picture taken.

We were astonished to find out that it was after five o'clock and we all had a distance to drive to get home. I couldn't resist just one more little adventure and took the Peal Ferry across Bull Shoals to Missouri. I hope we visit the Lead Hill glade again soon as it is the kind of place that will have a constantly changing progression of native plants. As soon as my camera cools down, I'll be heading back.

VINES AND TENDRILS

By Vernon Human

Why should a plant want to vine? What's to be gained by it? Of all the questions posed by vines and vining, this one perhaps is the easiest to answer. Plants elect to vine when they cannot compete in traditional ways and lack any effective strategy for getting somewhere other than where they are. Vining is a response to the inability of plants to walk away when moving becomes necessary.

If you cannot by brute force carve out a place in the sun among the intermeshing canopies of competing shrubs or trees, you have to find another way to reach the sunlight that all plants must have for food production. Vining is the method favored by certain species. Gourds and melons are examples of plants that vine laterally, thus enabling their leaves to reach critical sunlight even when the plant is rooted in permanent shade. Other species, such as wild grapes and cucumbers, vine vertically, clinging to the coat tails of the very species which otherwise out-compete them. To put it in football terms, they force their hosts to run interference for them.

A vine has a choice of climbing and clinging methodologies. Poison ivy climbs by means of "sucker feet", numerous small attachments that erupt from the "margins" of the vine and attach to the bark of the host tree --or to sheer rock, if that is what is called for. Wild grapes favor tendrils, structures spaced along the vine that slowly writhe about in search of something to which to cling. If they find it, they wrap around it, thereby attaching the vine to the upward-growing host. Lateral

vining plants produce tendrils too, for although they usually don't have to hold their vines aloft, they do need to keep them anchored so that they aren't blown willy-nilly by hard winds.

But there are other ways for a vine to climb and to hold on. The entire plant can twine about its host. Japanese honeysuckle is an all-too-common example. Still other plants don't attach to their hosts at all, but rather collapse upon them so that they are borne upward by the host plant's own growth. Western poison oak uses this system very effectively. Two of my favorite vining systems

are illustrated by a pair of closely related Schophulariads of the California chaparral. One has

long, slender leaf petioles that, when they touch an object, take a few turns around it; thus they are both leaves and "tendrils". The other species, stranger still, has peduncles, or flower stalks, which themselves twist about an encountered object. The peduncles are so long and attenuated that the pretty little blossoms seem to float on air.

There is nothing new in the world of plants; all tendrils are modifications of already existing plant parts. But plants are wonderfully individual in the matter of which parts to use. The tendrils on our wild vetch spring from the distal tips of the pinnate, compound leaves. Note that the terminal leaflet is missing, for it has evolved into a tendril. The catbrier's tendrils are modified stipules. Wild grapes have the most wonderful adaptation of them all; their tendrils are modified blossom clusters! Look at enough grape tendrils in season and you might occasionally find a stunted, relictual blossom on one of them.

Tendrils vary in the ways they operate because different plants have different needs. A

succulent annual's tendrils need only take a few turns around an object, for its life is short and the likelihood of its destruction therefore is low. In our Ozark woods, wild grapes are at the opposite extreme. Their tendrils must have the stamina to be effective for decades, and the strength to hold firm against the fiercest windstorms and support the weight of a vine perhaps six inches in diameter. Theirs is a quietly astounding performance.

Many tendrils, including grape, not only attach the vine to an object, but also "take up the slack", drawing the vine tight to its support. Tendrils do this by twisting or coiling. But how? Tie a string between two points and turn it and you will get nowhere, for both ends turn in the same direction. Look closely at successful grape tendrils and you will see that they always have a kink somewhere near their centers. Look more closely still and you observe that the direction of coil reverses at the kink. This is the tendrils' big secret; the coil works because the two halves or parts turn in opposite directions. The slack is taken up, the vine tautly supported.

These are wonderful adaptations, everyday miracles in our own backyard. They need only for us to get out there and appreciate them.

ORCHID NOTES -- PART TWO

BY Carl Slaughter

Orchids are angiosperms. This means that they are members of the plant kingdom that have flowers. Orchids are also monocots. Monocots are plants that, as they germinate, have only a single leaf springing from the seed. Dicot seeds produce two leaves as they germinate. The leaves of monocots have a parallel vein structure, and its floral parts are in groups of threes. Dicots have a leaf structure with a central vein with other veins connecting to it. In other words, a non-parallel vein structure. Their floral parts are arranged in multiples of two or five.

SO ORCHIDS ARE ANGIOSPERMS AND MONOCOTS.

Orchids have certain characteristics that define what they are. Orchids have a large number (some people estimate over a million) of very small dust like seeds that can be carried great distances by the wind. These seeds, unlike other seeds, lack an endosperm. The endosperm is a substance that

provides food for the embryo. Orchids must, therefore, depend on another way for providing sustenance not only for the seed, but also the growing plant. This other way is through a partnership with a group of fungi that collectively are known as mycorrhizal fungi. Some orchid species are more dependent than others on these fungi for survival. This explains why it is difficult for them to survive transplanting. An act that should be performed only to save the orchid from destruction.

ORCHIDS HAVE SMALL SEEDS

A number of flowers are symmetrical. The lily is one. Orchids are irregular and yet they are bilaterally symmetrical. If you took a knife and divided, starting at the midpoint of the lip, an orchid into two parts, one side would be the mirror image of the other.

AN ORCHID IS BILATERALLY SYMMETRICAL

The ovary of an orchid is located beneath the floral parts of its flower. Beneath the petals and beneath the sepals.

AN ORCHID'S OVARY IS INFERIOR.

All orchids have three sepals and three petals. Sometimes by fusion they appear to have less. One of the three petals of an orchid is different from the other two. It is usually larger, longer, and more colorful than the others. This different looking petal is called a lip. The lip can be entire or can be lobed. It can be flat or it can be inflated.

ONE OF THE ORCHID'S PETALS IS DIFFERENT AND IS CALLED A LIP

Most flowers have separate male and female reproductive parts. The male reproductive part consists of a stalk known as a filament. At the apex of the filament is found the anther. Pollen grains are produced and stored in the anther. The female reproductive part is a body known as the pistil, which is composed of an ovary at its base, a stalk known as a style, and at the top of the style a stigma. The stigma accepts the pollen grains for the beginning of their journey, via the style to the ovary. Orchids do not have this type of reproductive system. Orchids have no separation of the male and female reproductive parts. Orchids have a unique mechanism in which there is a body produced by the fusion of the stamen (anther and filament) with the style and stigma. This fused body, containing all of the male and female parts necessary for fertilizing the ovary is called a column.

THE MOST DISTINGUISHING CHARACTERISTIC OF AN ORCHID IS THAT IT HAS A COLUMN

To be continued.....



Final Notes

This is my last issue as editor. I am leaving on the 10th of September to spend the semester at Harding's new branch campus in Viña del Mar, Chile. We have a group of 28 students who will be the guinea pigs for this new program. There is a major tropical garden just minutes away from where we are staying that I can't wait to visit. We have scheduled trips to the Andes for a week of skiing, a trip to the Atacama Desert, a trip to the Lake District in the south as well as to the Torres de Paine and the Straits of Magellan areas that are supposed to be similar to parts of Alaska. I am hoping to do a lot of plant and scenic photography as well as teach environmental and earth science. It's going to be a tough job but someone has to do it! If things go well I may be out of the country often in the next few years which is one of the reasons I asked not to be re-nominated as your editor.

It has been 15 years since I was first elected (drafted) to fill the position of editor for the ANPS. As a charter member I have seen the organization grow from a couple of dozen to near four hundred. We are a diverse bunch, from true "arkies" with "growing up on the farm" type of knowledge of plants to those with PhD's in plant taxonomy. As a whole, we have in common an appreciation of the great diversity and beauty of the God's natural world. We also have a desire to preserve and protect that which cannot be replaced once it is gone.

Unfortunately, some of those places where we use to take field trips have now been converted to housing developments and shopping centers and the ecosystems that supported the diversity are gone. Ah, progress!

Not that nature itself is benign. I am still in a never-ending battle with those foreign pesky invaders privet and Japanese honey-suckle to mention only two of the worse.

I am an optimistic-pessimist when it comes to what is happening in our state and others in reference to the environment. There are parts of our state and nation where the water and air is cleaner than it was 20 years ago but other once pristine places are now contaminated. We now have "protected" wilderness areas, but when push comes to shove, are we gone to destroy some of those areas to get a little more oil when there are energy alternatives that could have been developed by now-- if we had truly learned anything from the oil embargoes of the 70's. But I digress, The ANPS has developed into an organization that has been successful in meeting its primary objectives of preserving and conserving native plants and educating the public and members as to their value --- and having a lot of enjoyable times together as well. May it persevere in that task!

There are several people in particular that have helped make my job as editor easier. First of all thanks to Carl Amason --- what a gem--always encouraging and nearly always supplying articles. Other notable article suppliers have been the other Carls. Carl Hunter and Carl Slaughter. Then there are I and II John -- John Simpson and John Pelton. There have also been several secretaries that have always gotten the minutes to me in plenty of time, the most notable of which is Sue Clark --who has served in that capacity several times. Eric Sundell also deserves special thanks both for occasional articles but also for getting the mailing labels to me within a few days of my requesting them time, after time, after time. For this issue in particular thanks to Burnetta, MaryAnn Linda and Vernon. Thanks all !!!!!

By the way, the nominating committee is still in need of nominees to take over as editor. If you have any interest at all or know of someone please contact a member of the nominating committee mentioned on page 3 or any of the officers.

Ron Doran, September 3, 2002

Arkansas Native Plant Society Membership Application

Please check appropriate box below.

Membership Categories:

- ☐ \$10..... Student
- ☐ \$15..... Regular
- ☐ \$20..... Supporting
- ☐ \$25..... Family Membership
- ☐ \$30Contributing
- ☐ \$150.... Lifetime Membership
(55 and over)
- ☐ \$300Lifetime Membership
(under 55)
- ☐ New Member
- ☐ Renewal
- ☐ Address Change

Name _____

Address:

Street or Box _____

City _____

State..... Zip _____

Telephone: _____ - _____ - _____

E-Mail address _____

Please cut and send this form along with any dues to:

**Eric Sundell, Membership ANPS
Division of Mathematics and Science
University of Arkansas
Monticello, AR 71655**



Please check your mailing label!

If your mailing label has a 01 or earlier it is time to renew!

Life members will have an LF

Please fill in the information form on the opposite side of this page and send it with your renewals, applications for membership, changes of name, address, e-mail address or telephone numbers to the address given on the form: [Not to the editor.]

You can also renew at the Fall Meeting.

2001-2002 ANPS OFFICERS

President.: Lana Ewing.....(501)394-4666

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dor@harding.edu

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Secretary: Sue Clark.....(501)666-5149

Membership: Eric Sundell.....(870)367-2652

Treasurer: Al Hecht.....(870)836-7759

Ark. Coalition: Carl Hunter.....(501)455-1538

Awards/Scholarship: George Johnson
george.johnson@mail.atu.edu

Check out our web site at www.anps.org

The purpose of the

Arkansas Native Plant Society

is to promote the preservation, conservation, and study of the wild plants and vegetation of Arkansas, the education of the public to the value of the native flora and its habitat, and the publication of related information.

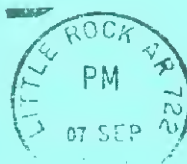
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Claytonia

Newsletter of the Arkansas Native Plant Society

Spring 2002 General Meeting

Russellville

April 12, 13 & 14th.

Registration will begin at 3 pm on Friday April 12th. Registration & meetings will be held at the Central Presbyterian Church located 400 West Main Street, Russellville, Arkansas.

Among our speakers will be Dr. Eric Sundell, speaking on pollination of *Asclepias* and Jay Justice, who will present to us - Edible and Poisonous Mushrooms of Arkansas. Lots of good field trips lined up.

There are a number of motels in Russellville. Super Eight has given us the best price (if we can get 20 rooms) of \$40.00 for 2 persons (plus tax) Please identify yourself as ANPS member. They do have a continental breakfast from 6 to 9 AM. Super Eight is located at Highway 7 & Interstate 40. Phone 479-968-8898. Other motels in the general area are: Best Western 479-967-1000 (rooms \$52.00 plus tax) Hampton Inn (479-858-7199) Fairfield Inn (800-228-2800) Holiday Inn 479-968-4300. All these motels located within about $\frac{1}{2}$ mile of each other.

There's lots of eating places - Cracker Barrel fronts I-40 near the motels, Dixie Café is close, Cagle's Mill is located in the Holiday Inn which is also in this area. Ruby Tuesday's is near by also. There's a great Chinese buffet about 2 - 3 blocks south on Hwy 7 (also known as Arkansas Avenue). Also on South Arkansas (hwy 7) is Madame Wu's - a nice place to dine. Of course, being a college town there are tons of fast food restaurants - mostly located on Arkansas Avenue.

MaryAnn King

FALL GENERAL MEETING MINUTES

October 20, 2001

Arkansas State University, Jonesboro, Arkansas

Following the annual auction, the business meeting of the Arkansas Native Plant Society was called to order at 7:30 p.m., 2nd Vice-President Mary Ann King presiding.

SECRETARY'S REPORT: Carl Amason moved that the minutes of the spring meeting which were published in the Claytonia be approved. Linda Gatti Clark seconded. The minutes were approved as published.

TREASURER'S REPORT: Al Hecht reported a balance of \$28,088.59, which includes the scholarship, flora and awards funds of \$20,864.42, leaving a balance of \$7,224.17 in the ANPS Operating Fund. Dr. Linda Gatti Clark moved that the Treasurer's Report be approved; Carl Amason seconded; the report was approved as submitted. Al announced that the auction made an estimated \$850.00.

OLD BUSINESS: Dr. Jim Peck reported on the Arkansas Flora Committee progress. Fall of 2002 is the target date to make the checklist available to everyone. If the checklist is ready by fall, the Atlas should be ready the following year. Over 100 people attended the plant identification workshops that were held in September.

In the absence of Phillip Moore, a botanist with the Arkansas Highway Department, Carl Hunter reported on the progress of wildflowers along the highways. Carl had available some of the 110,000 new brochures

put out by the Highway Department. The Arkansas Highway Department could lose federal enhancement money if designated routes on the brochure map are mowed. If someone believes that an area needs to be designated a wildflower area, they should call Phillip Moore.

Carl reported on the ANPS/Master Gardener progress. ANPS has worked with 300 Master Gardeners in Pulaski County. There are now six wildflower gardens at Pinnacle Mountain State Park and over 200 Master Gardeners usually attend the meeting there once a month. The Ouachita Chapter of ANPS has also done a lot of work on this project.

The Nominating Committee presented the slate of officers for the 2001-2002 year as follows:

Vice-President: Linda Gatti Clark
Secretary, Sue Clark;
Historian, Carl Amason;
Communications/Publicity, Thera Lou Adams;
Scholarships/Awards, George Johnson.
Don Crank moved that it be accepted; Carl Amason seconded; the 2001-2001 officers were elected unanimously. The Nominating Committee consisted of Sue Clark, Carl Slaughter and Oralee Price.

NEW BUSINESS: Mary Ann King announced that the Spring Meeting will be held in Russellville probably in the latter part of March, the date will be announced after the

determination of the date of the Arkansas Academy of Science. Barbara Little announced that Mary Alice Beer of Fairfield Bay has clipped and maintained a creek area and glade area near her home and would like to have visitors to the area. Barbara will send this report to Ron Doran. A change in the Sunday field trip was announced by Annette Holder. Theo Witsell will lead the trip to the Sunken Lands Area, a new

Pondberry site. The group will meet in the parking lot of ASU at 8:00 A.M.

The business meeting was adjourned at 8:00 p.m. and Theo Witsell with the Natural Heritage Commission presented a slide show.

Respectfully submitted,
Sue Clark, Secretary

Spring Field Trips

March 9, 2002 Early Spring Field trip - Calion

Carl Amason will be leading another of his wonderful plant exploration trips. Who knows exactly what will be blooming that day but you're guaranteed a delightful time. Early spring violets, houstonia & other spring ephemerals. Meet Carl at his place between 9 & 9:30 or so. Bring a sack lunch.

Directions: Those coming from the north follow US 167. When the concrete of the Ouachita River Bridge changes to blacktop, go 0.9 mile to the intersection of Calion's Main St. (It doesn't cross 167) turn left and then go 0.5 mile cross the old railroad ramp, turn right onto Hoover Street between two cyclone fences. Go one Block. Turn right on Ward St, which curves and crosses the end of Calion Lake. Go 0.5 mile where Ward becomes a county road. Carl's place will be .08 mile on the right. (there are no house on the left but three on the right) From El Dorado, go 2.5 miles past AR 335 to Calion's Main Street & proceed as above.

March 16, 2002

John Pelton will offer a field trip to Crooked Creek in Montgomery County. The trip will feature the OzarkTrillium. Contact John at 501/316-1057 for further information.

June 8, 2002 Late spring field trip - - Calion

Carl Amason will be leading another exploration - this time to see Cherokee bean in flower & *Alophia drummondii* in bloom. Meet Carl at his place between 9 & 9:30 or so. Bring sack lunch. Directions above.



2001 FALL MEETING FIELD TRIP REPORTS

Village Creek Park

At the beginning of the hike in Village Creek Park Larry Lowman briefly described the unique character of Crowley's Ridge, summarizing the environment to be explored as both a geological and botanical anomaly.

The hike in the park traversed a cross section of environments on the lower & middle slopes, and a peak (hogback) of the loessial hills typical of the middle section of Crowley's Ridge. A highlight was passage through a mature forest which had not seen timber harvest since WWII, with splendid cathedral-like specimens of Beech, Sugar Maple, and White Oak as predominant canopy.

The group viewed two trees that at one time were designated state champions for their species, a White Walnut (or Butternut) *Juglans cinerea* (one of the few hardwood trees to appear on the Arkansas endangered species list)and a spectacular tree-like specimen of Red Buckeye, *Aesculus pavia*.

Among the special plants viewed by the group:

--in an open area at the beginning of the hike, the group was impressed with the 6 to 8 foot plumes on the native Silvery Plume Grass (*Erianthus alopecuroides*)

--several fine mature specimens, and many juvenile Cucumber Magnolias (*Magnolia acuminata*)

--Lousewort (*Pedicularis canadensis*)

--abundant drifts of the unusual epiphyte Beechdrops (*Epifagus virginiana*); blooms not quite open yet

--Starry Champion (*Silene stellata*)

--a healthy bower of Climbing Magnolia Vine (*Schizandra glabra*) in its native haunts

--a diminutive St. Johnswort known as St. Andrew's Cross (*Hypericum hypericoides*)

--some spectacular specimens of Serviceberry (*Amelanchier arborea*) near the crest of a hogback ridge, some of which were in the 4 to 6 inch diameter range.

--Farkleberry (*Vaccinium arboreum*)

--a couple of species of False Foxglove (*Gerardia* sp.); just vegetative growth of a large yellow species, and flowers on several stalks of a very diminutive species with a pale lavender blossom.

By Larry Lowman



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Fieldtrip Report - Bono Lake Site

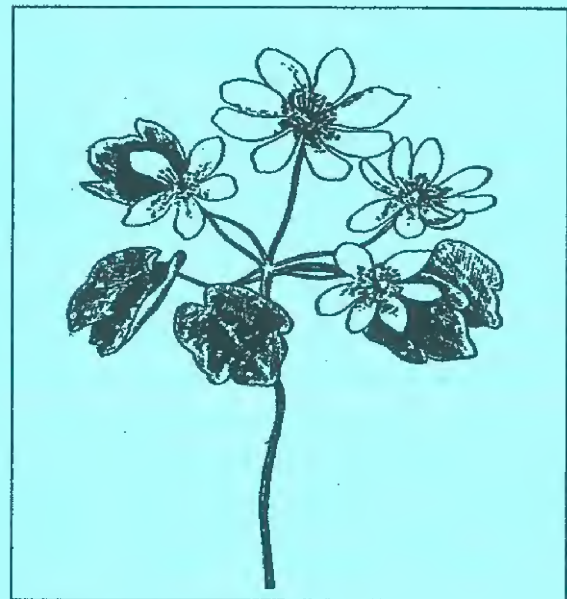
Saturday October 21, 2001

Two groups of our Fall meeting attendees were treated to one of the richest and diverse areas on Crowley's Ridge. This area unfortunately has been purchased by the Arkansas Game and Fish Commission and will be transformed into a lake for flood control and recreation. We usually find out our favorite areas have been damaged after the fact, in this case we know ahead of time it will be flooded.....I don't know which is more unpleasant.

A quick botanical survey of just a small area of this site revealed 136 species. This area is covered in large hardwood trees including very large Tulip Poplars, many species of under story trees and shrubs, and many plants. I was pleased that many in our society had the opportunity to view this site before it is destroyed, it will be a great botanical loss to NE Arkansas. Many expressed their frustration with this situation and we appreciate your concern.

The NE Chapter of the ANPS will begin a plant rescue next spring. We will try to keep you informed of our schedule and everyone is welcome to come help. My thanks to the Botanists in our society that came along, we really appreciated your knowledge and help with identification on our trips.

By Justin Holder



Ouachita Chapter Events

All other chapter and ANPS members are invited.

March 9 ---Jonquil Day - Guided tours - Wildwood 9:00-4:00

April 13 --- Azalea Day - Guided tours - Wildwood 9:00-4:00

May 4 --- Chapter Meeting - Pinnacle MT. ST. Park 10:00 -Pot luck and field trip to follow.

June 1 --- Wildflower Day - Guided tours - Wildwood 9:00-4:00

Carl Hunter Programs

ANPS members invited as Carl's special guests.

March 16, "Shrubs" -Garden Show, Malvern - Fair Grounds - 10:15

March 19, "Wildflowers" -- Rogers Library, 711 S. Dixieland Rd., 501-621-1152 -7:00PM

March 27, "Wildflowers" - Master Gardeners training - Arkadelphia - Fair Grounds - 1:00

April 5th, 6th, Slides , booth at Flower and Garden Show - Dewitt - 6:30 (5th)

April 8, "Woodies and Wildflowers" --Garvin Gardens—Hot Springs - 1:00

April 11, "Butterflies and Hummingbirds" Fletcher Library, Little Rock—7:00PM

May 18, Wildflower Walk - Ozark Natural Science Center, 1:00-4:00

Notes from John Pelton

*

Have you ever had a ten-year-old ask,
"Have you ever seen a flower open?"

One Sunday morning in January 2002, my great-nephew, Billy Paulus, who was seated next to where I was taking the offering during worship service, leaned over and whispered, "Have you ever seen a flower open?" I whispered "Yes" in reply, and smiled at Billy. I'll never forget that moment of question and answer. So this incident brings to mind a field trip to Mt. Magazine with Dr. Tucker and a group of ANPS members and friends. I had invited Bill Summers to come from St. Louis to go with us to Mt Magazine for the field trip. As many of you know, Bill was working on the Flora of Missouri project at that time. Well, on the way home from Mt. Magazine I suggested we go out to Owensville to see the Burk Road Glade. Bill and I left the van on the roadside and walked out to the glade about ten feet and Bill said, "Look here, John!" I answered, "What is it, Bill?" "*Nemastylis nuttallii*," Bill replied. "Oh, what is that, a blue-celestial lilly? Well, later

I checked with my mentors, Ed Hall and Bob Clearwater, to find the date and time to be back to see the flowers bloom.

They gave me the date and confirmed Bill's timing of the bloom opening. This story turned out great for we have seen the repeated opening now for several years. Ed, Bob and now Theo, and I have all photographed this opening ritual. While walking around waiting for them to bloom we also found approximately 50 more plants on the glade. So thanks to Billy Paulus for reminding Uncle John to keep an eye on Nature. You may see a flower open up in just a few minutes - about suppertime.

Keep a watchful eye for Mourning Cloak butterflies. Frances and I saw one near Crooked Creek in Montgomery County, Jan. 25, while out photoing smooth Alder flowers and American Holly berries.

Keep the birdfeeders full and expect a new and exciting springtime.

Notes on Orchids

By Carl Slaughter

A Greek philosopher named Theophrastus gave us the name orchid for a group of flowers that we today place in a family named Orchidaceae by the international code of botanical nomenclature. The word orchid comes from *orchis*, which means testis. It was felt that the tuberoids (roots) of one genus of the orchid family resembled testis.

Luer, in 1975, stated that there were 30,000 species, in 800 genera, of orchids in the world. This is about 10 percent of all the flowering plants. Each author seems to have a different figure for the number of species and varieties that he feels are present. I am sure that these figures change on a daily basis. Each year a number of species disappear never to be seen again, and others are seen for the first time. Some orchids are assigned to a different genus or species. Others are promoted from a variety to a genus. Every year a number of hybrids are introduced. It is estimated that there are 105,000 hybrids. This number is still increasing. What makes it more difficult to know the exact number is that there are "splitters" and "lumpers". "Splitters" believe that differences deserve a different name designation, while "lumpers" believe that there are some differences that are not worthy of a separate designation. To make matters more confusing, there are various degrees for both the "lumpers" and "splitters". At the best the numbers are an approximate estimation. Hopefully, the Flora of North America will, at least for a while, slow down the numerous changes.

Orchids can be either terrestrial or epiphytic. Terrestrial orchids grow in the soil with a root structure that can vary from fibrous to tuber. Epiphytic orchids grow without the need for soil, in the air. This allows the plant to compete for sunlight in dense canopy areas where very little sunlight makes it to the ground below. They receive their nourishment through a root structure covered with a thick absorbent corky layer known as the velamen. Some orchids lack chlorophyll and are saprophytic. They rely on the organic material in the ground for their foodstuff. to be continued.



FERN NOTES

By Vernon Human

Verily, Ye Shall Rise Again!

Imagine yourself in my position. You're driving a typical Ozark dirt-gravel road through typical deciduous woodland, a road you've traversed several times during the last few weeks. You swing around a bend to see a room-sized road-crowding chunk of

rock capped with a solid stand of ferns. So what, you ask? Only that I hadn't seen a single fern on that rock during my previous passages! There's no way I could have overlook a forest of them. Naturally I investigated. As soon as I saw that the fern was a polypody, a light bulb flashed on: I had run into a colony of Resurrection Fern (*Polypodium polypodioides*.)

Its common & scientific names are interesting in their own right. The fern has two of the former, the other being Little Gray Polypody. But it's not appreciably smaller than our common Polypody & is even less gray. *Polypodium* means "many-footed" (I suppose in reference to its roots), and the suffix "oid" means "like" or "similar to", so we can loosely translate its botanic name as "the many-footed fern that looks like a many-footed fern!" There's not a lot of wish hidden behind the Latin of botanic names.

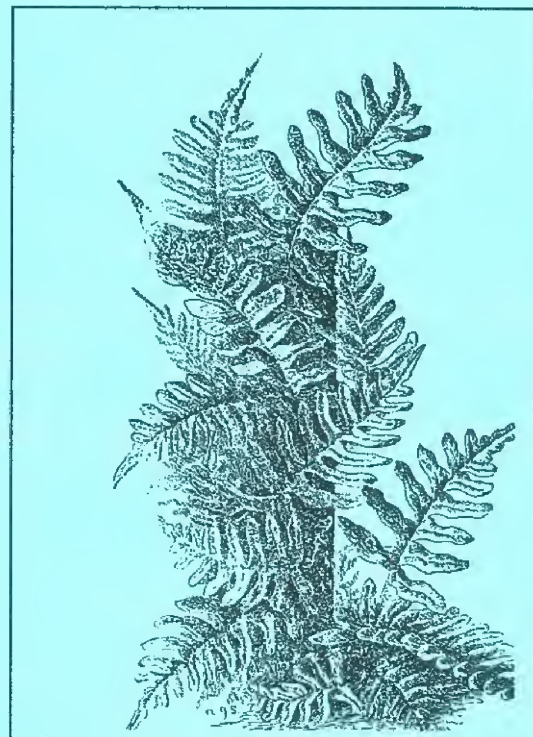
The polypody ferns produce feather-shaped fronds having slightly-offset, more or less simple frondlets on opposite sides of a petiolate central stalk. Resurrection fern isn't an exception. Its fronds grow to eight inches long, usually are more or less erect, and have many prominent reddish-brown & fuzzy fruitdots, or spore case, neatly aligned along the undersurface margins of every frondlet. When they are present, you can't confuse resurrection fern with any other species. Preferred habitat niches are tree trunks, limb surfaces & the upper surfaces of rocks.

Resurrection fern is famous for none of these reasons, but rather because it curls up & "dies back" in periods of drought, only to be miraculously revived when kissed by the rain. It can do this again & again if need be. Thus its other common named is explained, for it is "resurrected," brought back from the dead. Well... apparent death, actually, but the imagery is too picturesque to quibble over. And this also explains why I hadn't seen it during other drives along that road; two days earlier, substantial rainfall had ended a lengthy drought.

We have no such fern in California ... and wouldn't you know that the Ozarks have two? The other one also is sometimes called resurrection fern or resurrection plant, if only because it's inevitable that it would be. But we mustn't allow such careless duplication to run rampant, so let's use its other name, Woolly lipfern (*Cheilanthes tomentosa*). Its fronds are oblong in outline, slim, to eight inches in length, although most that I've seen were shorter. The smallest divisions are more or less marginally rounded, and the whole is densely short-woolly, which factors, combined, give the frond a handsome pebbled appearance.

But you can ignore all of that; woolly lipfern can be surely identified simply by noting where it occurs. For it has chosen the most unfernlike of habitats in which to dwell, namely high, vertical surfaces of cliffs, ledges, and great rocks. You can't expect a lot of ferny company up there. Such habitat is grossly exposed to desiccation by wind and sunshine, and is, moreover, a niche where water cannot soak in or accumulate. Such a fern figures to be highly evolved, relatively free of the fern clan's pathetic dependence on plentiful water -- right? Not woolly lipfern. No sirree! When its water is gone, it promptly turns brown, curls up, and "dies". For it too has mastered resurrection fern's method of survival in the face of always-needed but irregularly-forthcoming water. These ferns simply go into a state of estivation, reducing all water-using metabolic functions to near-zero. When rain comes, the desolate brown tufts unfurl into green and growing life once more. You can see woolly lipfern along the Buffalo River Trail between Ponca & Steel Creek Park.

Nothing prevents me from spending some months on Brazil's Amazon River. I would enjoy it too. But why wander so far afield when so many wonders like these, everyday miracles that I haven't seen before, are to be found just outside my front door?



End Notes

By John Pelton

February 6, 2002

Well, how about this snow from the southwest. 3/4 " on my picnic table this morning, so I'm reflecting on my trip to west Saline County to check out a somewhat strange (to me anyway) plant living in a spring fed ditch alongside Danville road, just as bright green as if mid-summer. After checking my books, still no clue, so I'm turning my research to another plant I photoed further north on the old Mt. Ida road in northwest Saline Co.

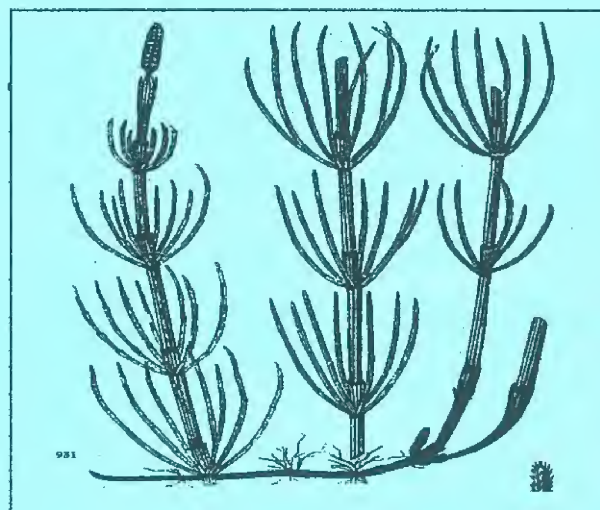
While driving downhill into the Alum Fork River area I noticed another spring-fed ditch with approx. 300 yds. of dark green foliage alongside the water and up the bank a yard or two. You guessed it - horsetails - winter scouring rush - *Equisetum hyemale*. (Where are their neighbors, the small dinosaurs? I see the small dragonflies all summer.) They remind us of the prehistoric era when they were up to fifty feet tall, in huge forests. Some say they helped to form coal deposits around the planet. These horsetails are smaller, but not much different from their ancestors in that they maintain the primitive reproductive system of having both sexual (egg producing) and asexual (spore producing) forms.

The egg producing form which grows from a germinating spore, is tiny and short-lived. It is the spore-producing generation that we see as horsetail plants. These primitive plants are classified somewhere between ferns and firs.

The domestic use of these plants has been recognized for centuries past for smoothing wood, such as bows and arrows, cleaning pots and shining metal objects. In our generation they are useful as biological monitors for water and soil contamination by zinc, cadmium, and lead. Extracts of some horsetails are also used for medicinal purposes.

In checking the Arkansas Atlas by Dr. Ed Smith, winter scouring rush is the common species in Arkansas. The plants on Old Mt. Ida road are the only ones I've seen in Saline County.

Be careful where you plant this genus for they can poison horses



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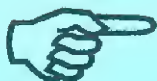
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The purpose of the Arkansas Native Plant Society

is to promote the preservation, conservation, and study of the wild plants and vegetation of Arkansas, the education of the public to the value of the native flora and its habitat, and the publication of related information.

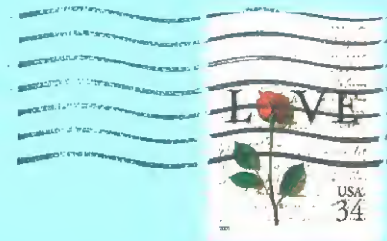
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